

A Page Devoted to the Automobile Industry

KEROSENE AS FUEL FOR MOTOR CARS

That kerosene as a fuel for motor cars will be one of the solutions of the present high cost of the gasoline problem is being proven by two University of Wisconsin graduates, who are making the tour of the world in a Henderson automobile, using kerosene for fuel.

After graduating from Wisconsin last June, Edward P. Kohl fitted up his Henderson car with all equipment deemed necessary for an "around the world trip," and left Indianapolis last August, planning to spend about eighteen months on this trip, and to arrive at San Francisco in time for the Panama Exposition in 1915.

His car was fitted out by the Henderson factory with their special carburetor and equipment to burn kerosene, and Mr. Kohl is making the entire trip using only kerosene as a fuel.

The car is now in Egypt, en route to the Holy Land, and the young men have covered to date a distance of over 15,000 miles, touring the following countries: the United States, British Isles, Germany, France, Holland, Austria, Russia and Italy. At Milan, Italy, their speedometer registered 18,000 miles, they having negotiated mountains, deserts and withstanding all kinds of climatic conditions.

In a letter written from Vienna at Christmas time, Mr. Kohl advised St. P. Henderson, vice-president of the Henderson Motor Car Company, that he felt like sending a Christmas present every time he filled his special forty-gallon coal oil tank, inasmuch as he calculated that he saved \$10 at each filling. This, because gasoline averages from 45 cents to 50 cents a gallon, while kerosene (for paraffine, as it is better known abroad) is purchased at an average cost of 16 cents a gallon.

At Milan, for the entire distance of 18,000 miles, Mr. Kohl's Henderson had averaged fourteen miles a gallon for each gallon of kerosene used.

The kerosene Henderson has attracted unusual attention in the foreign countries, and was examined and studied by engineers of several famous foreign automobile factories that were interested. At Stuttgart, Germany, in the factories of the Eisenmann Magneto Company, the Henderson motor was taken down and examined by the engineers of that company, inasmuch as the car was fitted with their magneto.

Very little carbon accumulation was found, and only nominal wear was noticed on the various parts. They attributed this lack of wear to the fact that kerosene seemed to lubricate the engine, as well as run it.

Mr. Kohl has compiled and sent to St. P. Henderson complete data about the performance of kerosene in the various countries, also a lot of valuable information regarding touring abroad, including detailed analysis of the average tourist's expense, best routes, etc.

The Henderson Motor Car Company of Indianapolis is representing reports and forwarding them to all motorists who contemplate touring abroad, and to motorists interested in kerosene as a fuel for motor cars.

OPERATIC STAR ADMIRES HUDSON GOODYEAR ADOPTS FACTORY MELODY

Miss Agnes Berry, for three years a member of the Chicago Grand Opera Company, was in New York during the Fourteenth Annual Automobile Show, and, while there, visited the Hudson Motor Car Exhibit at the Grand Central Palace, and was extremely pleased with the streamline design.

Because of Miss Berry's interest in the Hudson models displayed, she was given opportunity to ride in one of the new six-40 models, and her appreciation of the favor took the form of a letter, from which the following remarks are quoted:

"In visiting the motor show this afternoon I was much interested in the Hudson display. One's eye is unconsciously drawn to this car by its graceful outline and, upon closer inspection, its beauty of color, finish and upholstery is revealed. Later, during a tour of Central Park in the seven passenger phaeton, I was permitted to take the wheel, and marveled at the ease with which I could drive and handle the car. With its easily-operated, self-starting system, any woman should be able to drive the car without fear."

OLDFIELD BESTS AEROPLANE RACER

Having beaten Beachey once and tied him in the second heat, Oldfield raced the airplane for the third time, in Los Angeles, Wednesday, January 22, before 20,000 people, and won. Oldfield, in the swift of his racing cars, rounded the one mile track, closely followed by the aeroplane in 54.3-5 seconds, the first time. In the second heat, the time made was 55 seconds. Wednesday the track was in bad condition because of heavy rains, but Barney did the distance in 51 seconds.

Oldfield rode on Firestone tires each time, the non-skids performing perfectly.

Neither contestant covered the mile in his record time. Oldfield's fastest time is 36.2-5 seconds, while Beachey's is 36 seconds flat.

Motor Hire Service Co. Madison 539. 820 West Broad. 5 and 7-Passenger Cars. Special Attention to Strangers. PROMPT SERVICE. GOOD CARS. Inquire for Shopping Rates.



Every one who rides in the new 1914 Cadillac recognizes that its well-known smoothness has been supplemented by an entirely new riding quality, all due to the famous two-speed rear axle, which endows the 1914 Cadillac with even greater smoothness and flexibility than a six employing the ordinary gear ratio.

The Jones Motor Car Co., Inc. Allen Avenue and Broad. Monroe 463.

"UNIVERSAL CLUB" OF FORD MOTOR CAR

In line with the modern and progressive policy which characterizes its management, the Ford Motor Company, of Canada, Limited, through several of its enthusiastic executives, has organized a unique welfare and educational society called the Universal Club, the scope and purpose of which make it of considerable significance from a social, industrial and financial standpoint.

The first meeting, held recently in the plant at Ford, was for the purpose of organization. W. R. Campbell, assistant manager, in the opening address, explained the objects of the society. One of the principle ones is to promote the spirit of good fellowship among the members of the organization. In a large institution like the Ford plant, there are many men in the shops who do not know the man in the office, and vice versa. A social organization, in which all rub elbows on the same plane of equality, binds the organization in one common bond and cannot fail to promote the spirit of the company. Unity of effort is aimed at, and the promotion of healthy enthusiasm. The one point in fact is co-operation, as without this a great industrial body cannot work as a unit.

Entertainment and education are also purposes of this club. There will be banquets and diversions of various kinds. The first banquet was held on February 8, and will probably be shortly followed by an entertainment, giving the members a chance to display their musical and histrionic talents.

There will be instructive talks by the department heads covering processes of manufacture and presented in an informal, conversational manner. Outdoors will also be asked to speak from time to time on topics of general interest.

Recently a prize competition was conducted in the factory of the Goodyear Tire and Rubber Co., Akron, O., to produce a Goodyear song. The prize was immediately surprised at the veritable flood of manuscripts that poured in upon them from the musicians and lyric writers to be found in the army of 6,000 factory men. The prize was awarded a melody with real swing to it and words that express the spirit of Goodyear organization—at home, abroad, everywhere. Here are two of the verses:

Our friends are found in every land. Hurrah! Hurrah! Hurrah! They've used our goods and by us stand. Hurrah! Hurrah! Hurrah!

Our motto it is honesty. A model for posterity. Again we'll cheer for old Goodyear. Hurrah! Hurrah! Hurrah!

So let us all with one accord. Work on and pave the way. To keep our lead, home and abroad. Increasing every day.

Our people are a happy band. So once more cheer for our Goodyear. Hurrah! Hurrah! Hurrah!

The song was initiated at a factory-wide dance held in the factory lunch-room, and a few singers made the chorus distinctly familiar to the part of the city of Akron, in which the Goodyear factory is located.

Minnesota Buys Many Cars. Statistics of automobile ownership in the State of Minnesota show that the total number of cars licensed by that State in 1913 was 42,664, as against 23,638 in 1912. The largest share of this gain was in the rural communities, townships of 1,000 population and under showing an increase of 6,854 in 1913 over 1912. An interesting feature of the figures is the showing by high grade cars in these communities. It is shown that such cars as the Kissel, Knr, Packard and Cadillac are being very largely sold to farmers, as well as the cheaper vehicles. In the cities of Minneapolis, St. Paul and Duluth, the Cadillac, Chalmers, Kissel, Knr and Packard lead among the high grade cars.

COULD SAVE MONEY BY USING MOTORS

"In the city of Chicago \$50,000,000 dollars is spent annually to haul merchandise through the streets. This is a charge of \$25 a year for hauling against every person who lives in the city. The hauling is now done by 50,000 horse-drawn vehicles and 4,000 motor trucks. If 20,000 to 30,000 motor vehicles were used there could be the work at a reduction in expense of from \$20,000,000 to \$30,000,000 a year.

"These figures, compiled by the automobile chamber of commerce, indicate not only the enormous market for motor vehicles which as yet has hardly been scratched, but the vital interest of the public in encouraging the use of motor trucks," said Mark R. Lloyd, of the Lloyd Motor Company, local dealer of the Peerless.

"If Chicago alone the saving to be effected would amount to from \$3.25 to \$12 a year per person, and from \$35 to \$50 per year per family, according to these some reliable figures. Everybody knows that the cost of distribution is a large part of the cost of retail products. There is no indication that any reduction in freight rates can be expected from the railroads—they have been forced to ask for higher rates.

"But whereas an investigation by the Department of Agriculture in 1906 showed that it costs the average farmer 23 cents a ton a mile to haul his produce to the railroad by horses, the average ton-mile cost of operating motor trucks is 11 1-2 cents. In cities horse costs per ton-mile amount to 17 3-4 cents by motor. The difference in the cost of delivering individual parcels is shown in several businesses to be 3 cents by motor truck and 16 cents by horses.

"In addition to these direct savings, the figures bring out the fact that an area as large as Ohio, Indiana, Illinois and Iowa is required every year to grow hay and grain to feed to the 24,000,000 horses and mules which are used for transportation purposes. They consume in fact one-fourth of the agricultural products of the country. If this immense area were released to produce human food the supply would be tremendously increased. And if motor trucks are ever used exclusively it will be so released.

"There are many minor savings possible, such as reduction in the cost of keeping city streets clean, reduction in the rent charges for stables, because trucks can be sheltered in smaller space than horses and teams, and so on.

"If legislators and the public generally understood these facts every encouragement would be given to the motor truck development."

Cadillac Service

BY SHANNON G. LEES.

Service is the greatest word in the English language. In every line of human endeavor we find the "service" question receiving the most careful attention. In many lines of business it has been developed to a wonderful degree. Transportation companies, public service corporations, department stores, retail stores and manufacturers look upon their service to their patrons as one of the necessary elements of success. In fact, many a business has succeeded because they rendered good service; the cause of many failures can be traced to lack of service.

But in no business, perhaps, is the matter of service of such moment as in the automobile business.

The reasons thereof are at once apparent. Many buyers of cars have never owned a car before. They cannot be expected to know a great deal about the proper care of a car, when and where it should receive regular attention, what should be done and how to do it. Many owners, too, are not familiar enough with the construction of a car to give it the attention it deserves and should get. The result is that not one car in ten gets the little attention it ought to have and would get if the owner were taught what to do and how to do it.

In many cases repair bills are due to neglect. Not wilful neglect, but neglect resulting either from lack of knowledge on the part of the owner, or from fear of doing actual harm if an attempt be made to inspect or care for some part of the mechanism.

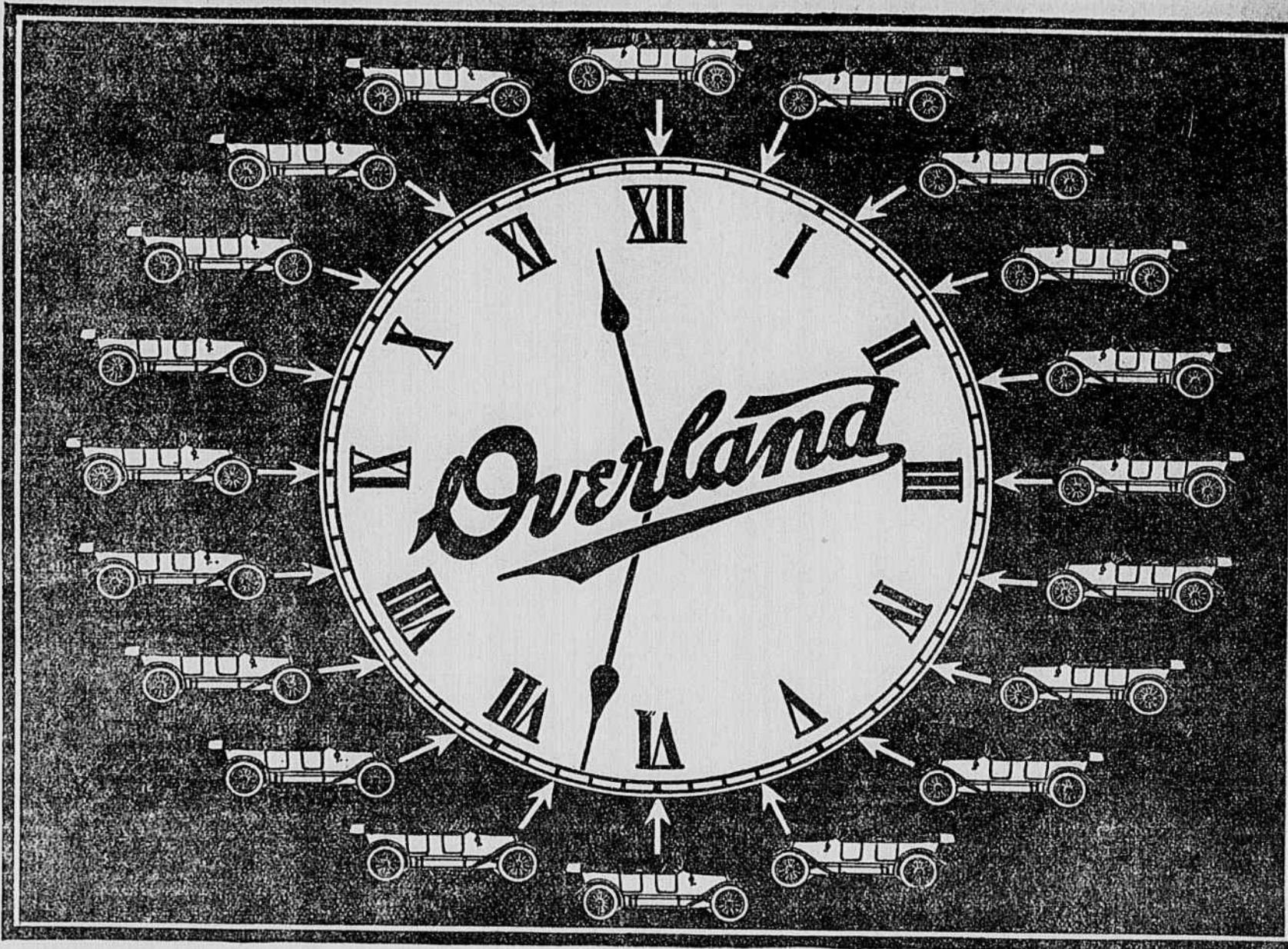
So service from the dealer is one of the vital things to consider in buying a motor car. It has much to do with the satisfaction that any car can give. It keeps up the second hand value of a car. It makes a car popular in a community, and a popular car is easily disposed of should the owner for any reason ever want to sell it. It forestalls possible trouble and keeps a car in readiness for constant use. It makes any car a better car. And it brings to the owner a feeling of security—a certain positive satisfaction that nothing else will bring.

It has been our policy from the first to give our customers the best class of service we know how to render, this in a free monthly inspection on all Cadillac cars. These inspections are made each month for one year from date of delivery. There is no charge for this service except for such oil and grease as may be necessary. This inspection is thorough. It is not a tick and a promise to do the work. It is a promise to do the work.

Good service should cover a careful examination of every part of a car from the radiator to the rear axle. It should include also all adjustments that should be made. Every grease point should be removed and refilled if need be. Lubrication should be given at every point where lubrication is required. The wheels examined for alignment, adjustment and lubrication. The carburetor, bearings, oiling system, ignition and every part of the motor should be carefully and systematically tested and inspected. The clutch, steering gear, self starting system, if there be one, transmission, rear axle, brakes and tires should be all gone over and any attention required be given them.

Cadillac service men work from a printed blank on which is listed in regular order the things to be done. In this way nothing is overlooked. The inspection is complete. And when the car is turned over to the owner, he can rest assured that everything is in perfect adjustment, every part is properly lubricated and the whole car is in first-class order.

After the inspection is finished a



A Complete Car Every 3 Minutes

EVERY time the clock ticks off three minutes we complete an Overland car. That's 20 cars an hour—nearly 200 cars a day!

Scores of well-known factories right now are not shipping over 2 cars a day. Our shipments—200 a day!

Each day our entire daily production is shipped—not to branches to be stored away—but to our 3000 dealers in all parts of the world who, up to the present time, have not been able to get sufficient cars to fill the ever increasing and insistent demand.

During the last quarter, ending December 31st, we produced and delivered over 12,000 Overlands.

This established a new record.

In other words, we shipped more cars during the last quarter than during any other previous quarter since we have been in the automobile business.

Now note this—the quarter ending December 31st is the poorest and dullest quarter in the year. Yet despite this, and directly in the face of the slow season we broke every preceding sales record of, not only this quarter, but of any previous quarter during our existence.

The world at large seldom makes a mistake. If, year in and year out, public demand for Overlands increases by leaps and bounds, way beyond our annual capacity (now

50,000 cars) its indicative of how this car stands in the estimation of the buying and ever critical public.

Are you in the market for a car?

Have you examined the Overland value?

By examined, we don't mean a hasty meaningless demonstration nor a superfluous talk about dry technicalities. By examination we mean a strict comparison of every essential basic fact, such as the power of the motor, the size of the tires, the length of the wheelbase, the fineness of the equipment, the roominess and comfort of the tonneau, the completeness of the car—the finish—the appointments—the economy on gas and tires.

Make this kind of an examination and comparison with any \$1200 car made and you'll find that in the \$950 Overland you get practically everything any \$1200 car can offer.

We do the largest business because we have always given more car for less money. Thus we have grown to be the world's largest producer of this type of car.

Follow the suggestion as outlined above and you'll not only save yourself considerable money, but what is more, you'll get a superior car in the bargain.

'Phone our dealer today.

OVERLAND MOTOR COMPANY, Distributors
114 West Broad Street, Richmond, Va.

The Willys-Overland Company, Toledo, Ohio

SPECIFICATIONS

\$950

Electric head, side, tail and dash lights

Storage battery

35 Horsepower motor

114-inch wheelbase

33 x 4 O. D. tires

Three-quarter floating rear axle

Timken and Hyatt bearings

Drop upholstery

Brewster green body

Nickel and aluminum trimmings

Mochar top, curtains and boot

Clear-vision, rain-vision windshield

Stewart speedometer

Cowl dash

Electric horn

Flush U doors with concealed hinges

\$1075

With electric starter and generator—J. O. Toledo

Manufacturers of the famous Overland Delivery Wagens, Garford and Willys-Utility Trucks. Full information on request.

typewritten report is sent the owner. If he has been neglecting any part of his car in any way this is shown up in the inspection, and his attention is called to this in the written report he receives. If he has been neglecting a grease cup for instance, his attention is called to the fact, and which grease cup it is. Neglect, abuse, either wilful or intentional, is discovered by this system of service, and I believe any owner will be glad to have his attention called to any mistake he may be making or caring for his car.

Good service means proper lubrication, and lubrication is the one great factor in the life of any piece of mechanical apparatus. How many owners of automobiles are absolutely sure at this moment that every part of their cars is sufficiently lubricated? Very few, if any. How many owners can lubricate their cars from one end to the other and not miss some point that is intended by the maker to have lubrication? Not many. Lack of lubrication means wear and eventual replacement of parts. Our service leaves

Official headquarters T. C. A. and A. A. A.

The largest and best equipped in the South.

Blue Ribbon Garage

1217-1223 West Broad Street.

Madison 1106-1107.

an owner with no excuse for his car lacking oil.

Second—The owner becomes better acquainted with his car, he knows what functions the different parts perform. He learns how much it means to him to have his car receive occasional attention. He learns how to treat a car, how to avoid abusing it and how to drive properly.

Third—It means that your car is always in the best working order; that it is never out of commission; that you get greater pleasure from it by reason of these things.

Fourth—Cars as a result of this service depreciate less. This service will further lessen the depreciation, because with regularly monthly inspection a car at the end of the year is in as good mechanical condition as when new.

No one is ready to say that the best cars are not better when they are backed up by good service, therefore service that one gets from the dealer they buy their car of is almost if not equally as important as the make of car which they select.

OVERLAND CARS SOLD IN CANADA

The Willys-Overland Company, of Toledo, Ohio, makers of Overland pleasure and delivery cars, has announced the establishment of a branch

factory in Hamilton, Ont., where cars for distribution throughout Canada and several other British colonies will be assembled. The Canadian company, which will be known as The Willys-Overland of Canada, Ltd., has taken over a plant there, and large additions to it are already under way. The lines distributed by the new concern are identical with those produced by the Willys-Overland Company, of Toledo, and the same standards, ideals and requirements as demanded by Mr. Willys from his United States company will be insisted upon by him in the new concern, of which he is president.

The establishment of the Canadian concern has become necessary because of the great volume of business done by the Willys-Overland Company in the Dominion. Hundreds of Overlands

have been sold in Canada each year, and a large part of the 50,000 cars being produced this year are going to our cousins across the border. The directorate and staff of the new Canadian company will be announced shortly.

Change in Carriage Justified.

"Events have proved that we acted wisely in readjusting the carriage capacity of Kissel Kar trucks," says an officer of the Kissel Motor Car Company. "Special interest is manifested in our two and one-half and three and one-half ton models, which took the place of the two-ton and three-ton sizes. We figured, and apparently rightly, that while the average cargo delivered is equal tonnage, it is invariably necessary either to put on extra burden or make another trip with a light load."

Any car will perform well on good smooth roads, and one car will demonstrate as well as another under ideal conditions. Many buyers are induced to purchase through such demonstrations.

Ask for a demonstration on Twenty-fifth Street from Main to Broad, and Cary Street from Seventh to Fifth, turning up Fifth to Main.

BUICK CARS CLUMB THESE HILLS EASILY ON HIGH GEAR. Such conditions as these are encountered in touring, especially in the mountains. Why not tour comfortably.



L. M. Foster, Agt.
808 WEST BROAD STREET

PIERCE-ARROW